



STATE OF MARYLAND

DMMH

Maryland Department of Health and Mental Hygiene
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Office of Preparedness & Response

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August 3, 2007

Public Health & Emergency Preparedness Bulletin: # 2007:30 **Reporting for the week ending 07/28/07 (MMWR Week #30)**

CURRENT HOMELAND SECURITY THREAT LEVELS

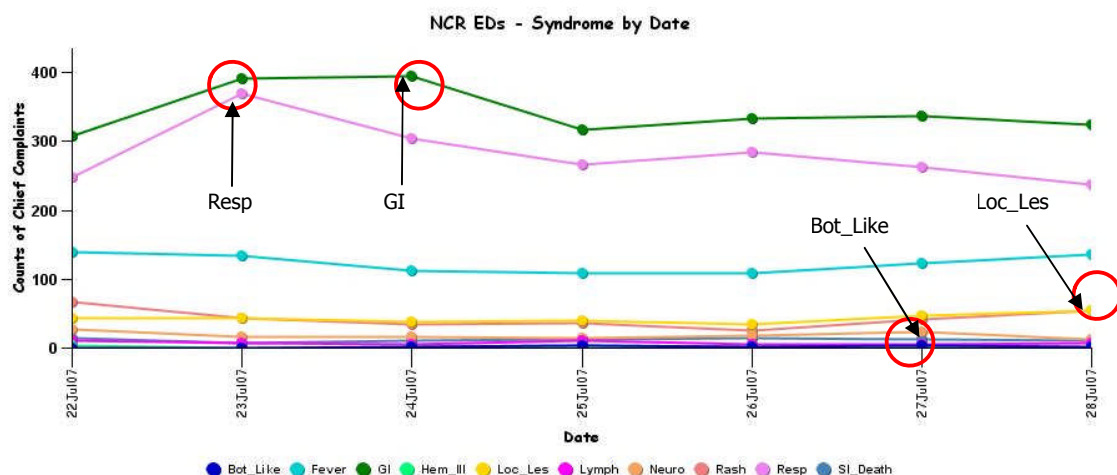
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

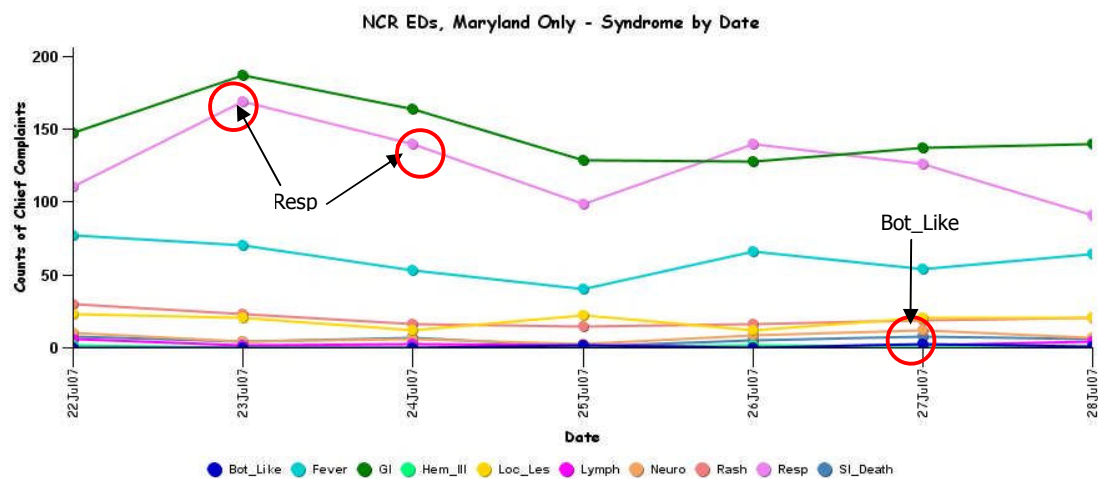
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

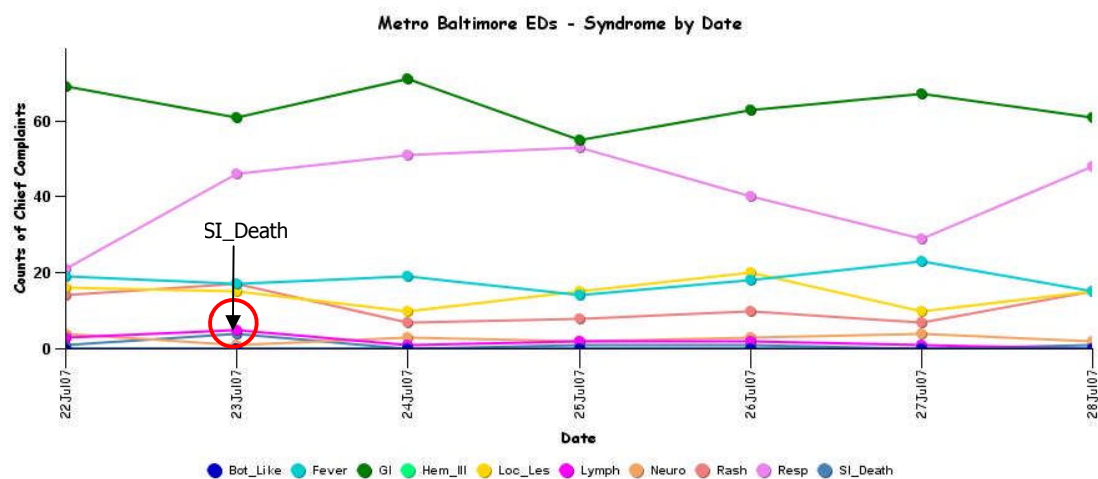
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system



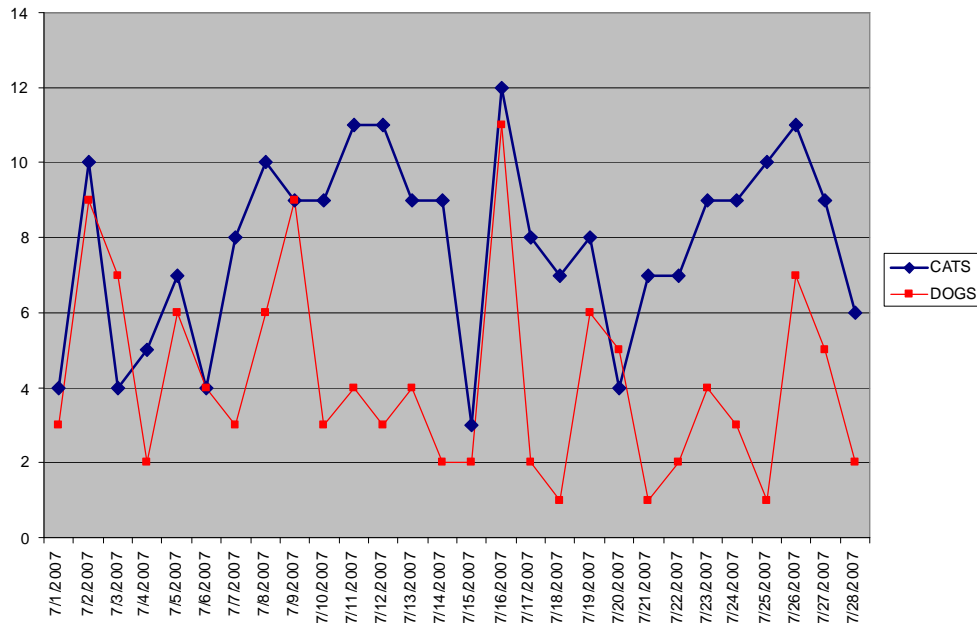
* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

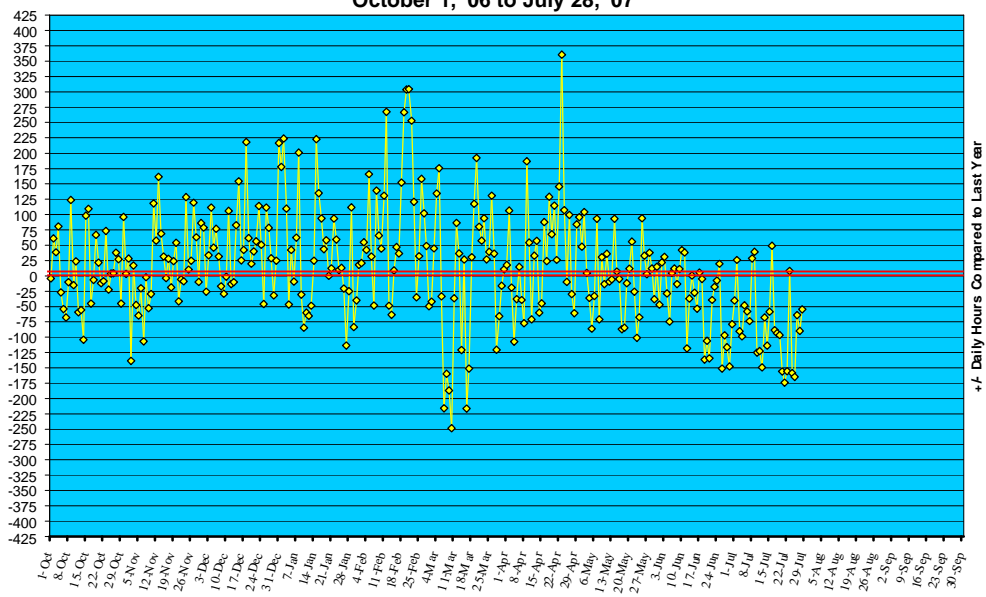
Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.

**Statewide Yellow Alert Comparison
Daily Historical Deviations
October 1, '06 to July 28, '07**



REVIEW OF MORTALITY REPORTS

OCME: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2007 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	Aseptic*	Meningococcal*	*(non-suspect cases)
New cases:	* Data not yet released from Division of Communicable Disease Surveillance		
Prior week:	* Data not yet released from Division of Communicable Disease Surveillance		
Week#30, 2006:	13	1	

OUTBREAKS: 4 outbreaks were reported to DHMH during MMWR Week 30 (July 22-July 28, 2007):

1 Gastroenteritis outbreak

1 outbreak of GASTROENTERITIS associated with a Daycare

1 Respiratory illness outbreak

1 outbreak of PNEUMONIA associated with a Nursing Home

2 Rash illness outbreaks

1 outbreak of HAND, FOOT, AND MOUTH DISEASE associated with a Daycare

1 outbreak of SCABIES associated with a Nursing Home

MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. No cases of influenza were reported to DHMH during MMWR Week 30 (July 22 – 28, 2007).

***Please note:** Influenza data reported to DHMH through the National Electronic Disease Surveillance System (NEDSS) is provisional and subject to further review.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: <http://bioterrorism.dhmd.state.md.us/flu.htm>

WHO update: As of July 25, 2007, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 319, of which 192 have been fatal. Thus, the case fatality rate for human H5N1 is about 60%.

AVIAN INFLUENZA, HUMAN (Egypt): 23 Jul 2007, A 25-year-old woman from northern Egypt has been diagnosed as having contracted the deadly H5N1 bird flu virus, the Health Ministry announced on Jul 22. Her infection has been confirmed by the Egyptian Central Public Health Laboratory and by the WHO H5 Reference Laboratory, US Naval Medical Research Unit No. 3 (NAMRU-3). The woman from the coastal town of Damietta went to her local hospital on Jul 21 complaining of high temperature, Ministry spokesman, Abdel Rahman Shaheen, told the official MENA news agency. She

was diagnosed as having contracted bird flu and was sent to Cairo where she is being treated with Tamiflu, he said. The woman had been working with domestic poultry, which had exhibited symptoms of the disease. Others in her family are now being tested. She became the 38th case of the virus disease reported in Egypt since the first outbreak was announced in February 2006. Women and children have borne the brunt of the virus disease due to their role in taking care of domestic fowl. Egypt's geographical location on major bird migration routes and the widespread practice of keeping domestic fowl near living quarters have led to it being the hardest-hit country outside of Asia. The government says it is conducting a vigorous campaign to combat the spread of the virus through vaccinations and raising awareness, but cases continue to appear. In June 2007, the World Health Organization said the fight against bird flu has improved around the world, but the situation remains critical in Egypt and Indonesia where the risk of the H5N1 virus mutating into a major human threat remains high. Egypt and Indonesia remain high-risk areas because of the permanent contact that many people in both nations have with domesticated birds.

NATIONAL DISEASE REPORTS:

SALMONELLOSIS, FREE UNPASTEURIZED MILK (Pennsylvania): 22 Jul 2007, Stump Acres Dairy has stopped giving away raw milk after some customers became sick and were diagnosed with salmonella this month. This marks the third time in 2007 that the North Codorus Township dairy has stopped selling or giving away raw milk because of customers becoming ill. Consumers who got raw milk from the dairy in July 2007 experienced gastrointestinal illness and have been diagnosed with salmonella, according to a news release from the Pennsylvania Department of Agriculture and the Pennsylvania Department of Health. A recent laboratory test result confirmed the presence of Salmonella in raw milk at the dairy, the news release states. The Department of Health is advising customers to discard any raw milk or any products made with the raw milk that came from the dairy. The agriculture and health departments have asked the dairy to halt sales of the raw milk, the news release states. Raw milk is milk that has not been pasteurized or homogenized. Terry Stump, the son of the dairy owner, said Stump Acres hasn't sold raw milk for about 2 months. However, the dairy has given it away to people who ask for it. "We will not be giving it away," Stump said. "Nobody wants to see anybody getting sick." He said the dairy plans to sell some cows to see whether that helps with the problem. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

BOTULISM, CANNED FOOD, HUMAN, PET (Multi-State): 23 Jul 2007, Castleberry's Food Company has closed its production facility in Augusta, Georgia, after 16 cans of chili sauce tested positive for botulism over the weekend, company officials said. In addition, the company has hired an outside firm to visit more than 8500 retailers around the country in an effort to quickly get recalled products off store shelves. So far, 4 cases of botulism have been reported, 2 from Indiana and 2 from Texas. All 4 people consumed Hot Dog Chili Sauce Original, a product made by Castleberry's. On Jul 21, Castleberry's expanded its recall of canned meat products that may be connected to a botulism outbreak. It recalled more than 80 types of canned chili, beef stew, corned beef hash, and other meat products in addition to the 10 brands it had recalled Jul 19. The expanded recall also includes dog food. The disease has only been seen occasionally in dogs and has not been reported in cats. The incubation period can be 2 hours to 2 weeks; in most cases, the symptoms appear after 12 to 24 hours. Botulism is characterized by progressive motor paralysis. Typical clinical signs may include muscle paralysis, difficulty breathing, chewing, and swallowing; visual disturbances and generalized weakness may also occur. Death usually results from paralysis of the respiratory or cardiac muscles. Pet owners who have used these products and whose pets have these symptoms should contact their veterinarian immediately. At this time we are not aware of pet illnesses associated with these products although we recommend that all these products be discarded. (Botulism is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

PLAGUE, PRAIRIE DOGS (Colorado): 24 Jul 2007, The El Paso County Health Department has confirmed several prairie dog sites are infected with plague. The sites are at Schriever Air Force Base and on neighboring property, in eastern El Paso County. Plague is commonly found in the Western US in small ground animals that have been bitten by fleas. Human cases aren't common, but plague can be transmitted to people from infected animals. Since 1941, there have been 55 cases statewide of human plague. According to the Health Department, take the following precautions to prevent infection: Avoid contact with sick or dead prairie dogs and rabbits; Keep a close eye on pets, and make sure they are treated for fleas and properly secured when outdoors; Do not linger in areas populated by prairie dogs, rabbits, or similar animals. Also do not attempt to catch, feed, or play with them; Treat pants, socks, shoe tops, arms, and legs with insect repellent when engaged in outdoor activities, such as hiking or jogging; Be aware of dead animal smells or heavy fly populations indicating animal "die-offs," which are a key sign of plague. Report such areas to the Health Department. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

E. COLI O157, GROUND BEEF (New York): 25 Jul 2007, A total of 7 people in Suffolk County, NY were sickened in recent weeks after eating undercooked ground beef contaminated with E. coli, county health officials said on Jul 23. In one case, a visiting 8-year-old North Carolina girl was hospitalized after her kidneys shut down, said Patricia Dillon, director of communicable diseases for Suffolk's health department. The girl remained hospitalized. All the victims told health officials they ate hamburgers at home or at backyard barbecues. Officials said the meats were of different brands and were purchased at several supermarkets, grocery stores, and local butcher shops throughout the county. Test results identified the bacteria strain as E. coli O157, one of hundreds of strains of bacterium that cause illness in humans, as the culprit. "The common denominator we're finding is inadequately cooked ground beef," Dillon said. Analysis showed that 2 of Suffolk's cases matched cases reported in Minnesota and California. A third Suffolk case matched those reported in

Michigan. Dillon said the analysis showed that the meats that sickened people in Suffolk were contaminated in the production chain outside Suffolk. "The meats consumed by people in Suffolk, California, and Minnesota all came from the same source of contamination," Dillon said. The men, women, and children who fell ill in Suffolk ranged in age from 8 to 72, and reported symptoms such as diarrhea or bloody diarrhea. All 7, who live in communities including Huntington and Cutchogue, told health officials they consumed ground beef, generally hamburgers, between Jun 9 and Jul 3. A sample of ground beef eaten by the North Carolina girl and her 11-year-old friend, who also was sickened, tested positive for E. coli by federal officials from the USDA, said David Graham, chief deputy health commissioner of the county health department. "Since we haven't been able to prove where it's coming from or who processed it, we're considering all ground beef to be dangerous," Graham said. He and other officials advised residents to cook all ground meat thoroughly. It's safe to eat ground beef cooked at temperatures of at least 160 deg F or until no juice comes out when patties are pressed, health officials said. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

HANTAVIRUS (Pennsylvania): 26 Jul 2007, A man contracted and recovered from hantavirus pulmonary syndrome, a rare and potentially fatal pneumonia-like virus carried by rodents, the state health department said on Jul 24. The unidentified 40-year-old man worked at a Boy Scout camp in Clearfield County. He was hospitalized after falling ill earlier this month but has since been discharged, said department spokesman Dan Miller. The camp has since cleaned rodent droppings in buildings, put in traps and poison bait to reduce rodent populations, and sealed openings to prevent rodents from entering, the health department said. Because the camp took immediate steps to avoid further exposures, it was allowed to remain open, officials said. Hantavirus was first identified in the United States during a 1993 outbreak in the Four Corners area of New Mexico, Arizona, Colorado and Utah. Most cases still occur in western states, and human infection is very rare in the eastern U.S., according to the Pennsylvania health department. The syndrome begins with fever, muscle aches, nausea and vomiting and can lead to respiratory failure and shock. Although there is no specific treatment, early diagnosis is important for recovery. In the past decade, only 3 previous cases were diagnosed in Pennsylvania residents, including 2 who died, according to the health department. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, BOVINE (South Dakota): 27 Jul 2007, Anthrax has appeared in South Dakota livestock for the 2nd time this year. Dr. Sam Holland, State Veterinarian, reports the disease has struck a cattle herd in Brule County. Anthrax was confirmed Jul 24, in a 100-cow cattle herd pastured southwest of Kimball. The death total was 11 head. This herd had not previously been vaccinated for anthrax. The herd was processed early this morning in accordance with the state veterinarian recommendations prior to lab confirmation which was received. Dr. Holland reports there have been numerous reports of livestock losses, which evidence suggests are heat related. Some involve significant numbers of over 100 head. Producers are urged to seek veterinary advice whenever numerous deaths occur. "I am having my staff collect samples from local veterinarians and hand delivering them to the Brookings lab to rule out anthrax, other infectious or toxic diseases," stated Dr. Holland. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents)* Non-suspect case

INTERNATIONAL DISEASE REPORTS:

CHIKUNGUNYA (India): 22 Jul 2007, Three more chikungunya cases have been reported in the capital (Delhi), taking the grand total of such cases registered so far to 11. While one case is from Delhi, the other 10 are patients who have come from areas outside Delhi. Chikungunya is a viral illness spread by the bite of infected mosquitoes. The disease resembles dengue fever and is characterized by severe, sometimes persistent, joint pain as well as fever and rash. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

EPIDEMIC TYPHUS, SCRUB TYPHUS (India): 23 Jul 2007, After over a month after a mysterious fever gripped 260 people of Deol village in the Kangra district, medical authorities in the district have detected some patients with typhus. A report of the Central Research Institute, Kasauli (CRI), where the blood samples of the patients were sent for examination, has confirmed 12 cases as positive for the rickettsial disease typhus. No deaths have been reported so far. According to epidemiologist at Rajendra Prasad Medical College (RPMC), Dr R.K. Sood, "The preliminary report of CRI has not confirmed the species of typhus, for which the blood samples of the 12 patients have been sent to National Institute for Communicable Diseases (NICD), Delhi. Until their report, we would not like to jump to conclusions." He is monitoring the situation of Deol village since the first week of July, when the 3 medical teams were sent out for a survey of the village for the first time after cases of fever started surfacing in the village. Sood said patients suffering with typhus have reported symptoms of moderate headache, fever, and shivering. They have been put on doxycycline and chloramphenicol and are responding positively. Experts say it is a mixed outbreak as many patients also tested positive for typhoid. Of the 260 cases of fever detected in the house-to-house survey in Deol village, 200 have recovered and the rest are under treatment. Cases are said to be declining although 4-6 new cases are being reported everyday. Since the past week, patients with high-grade fever are pouring in at Indira Gandhi Medical College and Hospital (IGMCH) and Deen Dayal Upadhyaya Hos parts of Shimla district. Senior Medical Superintendent of IGMCH Dr Hardayal Chauhan said about 20 such cases have been reported so far, but none of them have tested positive for typhus or scrub typhus. A few patients with fever and typhoid are also being treated in the hospital. (Typhus fever is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

Q FEVER (United Kingdom): 23 Jul 2007, Avon, Gloucestershire, and Wiltshire Health Protection unit has received 5 reports of acute Q fever with onset dates between the end of May and Jun 14. All 5 confirmed cases are residents of the town of Cheltenham (Gloucestershire), population 109 800. There had been no cases reported in Gloucestershire since 2002. The cases reported in Cheltenham did not have any occupational risk factors. Although all 5 cases reported possible environmental risk factors, no common exposures have been identified so far. Q fever (caused by *Coxiella burnetii*) is thought to account for approximately one percent of community acquired pneumonia in the UK each year and can result in serious complications such as endocarditis. The main reservoirs are sheep, goats and cattle. Transmission of Q fever occurs primarily through inhalation of contaminated aerosols. The organism is robust and can survive in dust and animal litter for many weeks and in dried blood for at least 6 months at room temperature. The most infectious animal materials are the fluids of birth and afterbirth, followed by blood, milk, urine and feces. Such infectious materials can be derived from livestock as above or from domestic animals, particularly parturient cats. Although Q fever is rare in the UK, it is more common in the southwest of England and Northern Ireland, probably because of higher exposure to animal sources. (Q fever is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (India): 24 Jul 2007, Thiruvananthapuram: The district reported 3788 cases of viral fever on Jul 23, including 23 cases of suspected chikungunya virus infection. From Parassala 212 viral fever cases were reported. Other reports came in from Kesavappuram, Manamboor, Vizhinjam, Perumkadavila, Vellarada, Neyyattinkara and Nedumangad. Suspected chikungunya cases are being reported frequently from Peroorkada area. The outpatient clinic at Peroorkada Government hospital has been very crowded in the past few weeks with fever patients. However, the hospital authorities had not been sending the stipulated number of blood samples daily for analysis. The Central team members who had visited the hospital sought an explanation for this from the district health administration. Blood samples are now being sent from the hospital and a few suspected and confirmed cases of chikungunya have been reported from Peroorkada. A section of the doctors are worried about the sustained pattern of viral fever incidence and the fact that chicken pox cases are also being reported now, during the rainy season. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, BISON (Canada): 27 Jul 2007, The 2 campgrounds at Wood Buffalo National Park in the Northwest Territories are closed for the next 2 days (Jul 27-28), while park officials burn bison carcasses infected with anthrax. A total of 6 infected bison were found in the park, including 2 on Jul 24. One of the animals was found near the park's Kettle Point campground, which led staff to ask a group of campers to leave. It's still safe for visitors to come to the park, and to the neighboring community of Fort Smith. Park spokesman Mike Keizer told CBC News that the campgrounds were closed as a safety precaution. "When there is a carcass in close proximity we're just moving them out until we dispose of the carcass through burning and spraying the area. Once that is done the camp will be reopened," Keizer said. "We're not keeping them out any longer than we have to, but while we're dealing with the actual incineration we just don't want people nearby while you've got dry trees and forest." Keizer warned people to stay away from any dead bison they see in the park. Infected bison cannot pass the disease on to other bison, but humans can be at risk if they come in contact with infected animals or carcasses. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhmd.state.md.us/>

Researchers warn H5N1 reassortment can occur beyond winter months (Findings reported in August issue of The Lancet Infectious Diseases):

<http://www.cidrap.umn.edu/cidrap/content/influenza/avianflu/news/jul2507seasonal.html>

World health experts have been working under a general assumption that a feared reassortment between human and avian influenza viruses—a scenario that could spark a pandemic—might only occur during a short winter interval, but researchers who recently examined virus circulation patterns warn that time frames for co-infection are wider and sometimes unpredictable.

Updated Information on Botulism Outbreak associated with Canned Chili Sauce, July 2007:

<http://www.cdc.gov/botulism/botulism.htm>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner.

Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

Questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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